

ABSTRACT OF THE DISCLOSURE

A method for calibrating a propagation delay in a network trunk comprising providing a counter in each of first and second network switches in a network switch system; each counter calculating a time period T_i from sending a marker in the first network switch until receiving a trunk package acknowledgement marker from the second network switch and a time period T_t from receiving the trunk package and the marker in the second network switch until generating an acknowledgement marker containing the trunk package; commanding the second network switch to append the time period T_t to the acknowledgement marker prior to sending the acknowledge marker back to the first network switch; reading out the time gap T_t after the first network switch has received the acknowledgement marker; and calculating a time delay T_x by an equation $T_x = (T_i - T_t) / 2$ wherein the time delay T_x is caused by sending the trunk package on each channel between the first and the second network switches. Further, the second network switch is operable to decode the received trunk package for calibrating the propagation delay based on the time delay T_x in order to determine a time gap between the packages in the same channel, thereby obtaining a correct data stream from the trunk package. This reduces the possibility of requiring a software tool at upper layer to wait or discarding a sequence of data stream due to erroneous data stream.